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10/758,090	01/16/2004	Edward Joseph Gallagher	SVL920030129US1 (0006.000)	5262
61539	7590	10/10/2007	MH2 TECHNOLOGY LAW GROUP (Customer No.w/IBM/SVL) 1951 KIDWELL DRIVE SUITE 550 TYSONS CORNER, VA 22182	
			EXAMINER	
			STACE, BRENT S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.	10/758,090	Applicant(s)	GALLAGHER ET AL.
Examiner	Brent S. Stace	Art Unit	2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 July 2007.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-20 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
10) The drawing(s) filed on 24 January 2007 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
5) Notice of Informal Patent Application
6) Other: _____.

DETAILED ACTION

Remarks

1. This communication is responsive to the amendment dated July 26th, 2007. In the amendment dated July 26th, 2007, Claims 1-20 are pending, Claims 1 and 9-11 are amended, and Claims 1 and 9-11 are the independent Claims. The examiner acknowledges that no new matter was introduced and the amended and claims are supported by the specification.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/27/07 has been entered.

Response to Arguments

3. Applicant's arguments filed July 26th, 2007 with respect to Claims 1-20 have been fully considered but they are not persuasive.

4. As to Applicant's arguments with respect to Claims 1-20 for the prior art(s) allegedly not teaching or suggesting "wherein the partial structured query language

statement comprises an action that may effect the type of the item," the examiner respectfully disagrees. Language "may" suggests or makes optional but does not require steps to be performed does not limit the scope of a claim or claim limitation. For the purpose of mapping prior art to the claims it is assumed that the limitation is not required. Thus, Sadiq still teaches the claimed limitations.

5. The other claims argued merely because of a dependency on a previously argued claim(s) in the arguments presented to the examiner, filed July 26th, 2007, are moot in view of the examiner's interpretation of the claims and art and are still considered rejected based on their respective rejections from a prior Office action (recited again below).

Response to Amendment

Claim Rejections - 35 USC § 112

6. In light of the applicant's respective arguments or respective amendments, the previous 35 USC § 112 rejections to the claims have been withdrawn, however new 35 USC § 112 rejections are warranted from the amendments to the claims.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 1 and 9-11 recites the limitation "that may affect the type of the item " in line 7. Language "may" suggests or makes optional but does not require steps to be performed does not limit the scope of a claim or claim limitation. As such, the claim is unclear if the partial structured query language statement comprises an action affecting the type of an item. See MPEP 2106.II.C. This rejection propagates downward through dependent Claims 2-8 and 12-20. For the purpose of mapping prior art to the claims it is assumed that the limitation is not required.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-3, 9-11, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,032,153 (Sadiq et al.).

Claim 1 can be mapped to Sadiq as follows: "A method of dynamically preparing a structured query language statement, [Sadiq, col. 4, lines 45-50] said method comprising:

- receiving a request that affects an item; [Sadiq, col. 2, lines 2-6]
- identifying a respective type of the item; [Sadiq, col. 2, lines 2-6 with Sadiq, col. 4, lines 13-15]

- retrieving a set of attributes [Sadiq, col. 6, lines 31-35] based on the type of the item [Sadiq, col. 6, lines 31-35 with Sadiq, col. 5, lines 14-21 with Sadiq, col. 4, lines 4-27] and a partial structured query language statement corresponding to the attributes, [Sadiq, col. 6, lines 31-35] wherein the partial structured query language statement comprises an action that may effect the type of the item; [Sadiq, col. 2, lines 2-6] and
- preparing the structured query language statement for the item based on the set of attributes and the respective partial structured query language statement in response to the request" [Sadiq, col. 6, lines 31-35].

Claim 2 can be mapped to Sadiq as follows: "The method of claim 1, wherein retrieving the set of attributes and the respective partial structured query language statement comprises retrieving a set of parameters that indicate a data structure for the item" [Sadiq, col. 4, lines 4-27].

Claim 3 can be mapped to Sadiq as follows: "The method of claim 1, wherein retrieving the set of attributes and the respective partial structured query language statement comprises retrieving a set of references for the structured query language statement" [Sadiq, col. 4, lines 4-27].

Claim 9 encompasses substantially the same scope of the invention as that of Claim 1, in addition to an apparatus and some means for performing the method steps of Claim 1. Therefore, Claim 9 is rejected for the same reasons as stated above with respect to Claim 1.

Claim 10 encompasses substantially the same scope of the invention as that of Claim 1, in addition to computer readable medium and some program code for performing the method steps of Claim 1. Therefore, Claim 10 is rejected for the same reasons as stated above with respect to Claim 1.

Claim 11 can be mapped to Sadiq as follows: "A system that dynamically prepares a structured query language statement, [Sadiq, col. 4, lines 45-50] said system comprising:

- a database that stores a plurality of items in a first table [Sadiq, col. 4, lines 4-27 with Sadiq, col. 3, lines 25-29] and stores information indicating attributes of each type of item in a second table; [Sadiq, col. 4, lines 4-27 with Sadiq, col. 3, lines 25-29] and
- a processor [Sadiq, col. 3, lines 25-29 with Fig. 1, detail 24] configured by a set of program code to receive a request that affects an item stored in the first table of the database, [Sadiq, col. 2, lines 2-6 with Sadiq, col. 4, lines 4-27] identify a type of the item based on information in the first table, [Sadiq, col. 4, lines 13-15] retrieve attributes for the item from the second table based on the item's type, [Sadiq, col. 6, lines 31-35 with Sadiq, col. 5, lines 14-21 with Sadiq, col. 4, lines 4-27] determine a partial structured query language statement based on parsing the attributes, [Sadiq, col. 6, lines 31-35] and prepare the structured query language statement for the item based on the retrieved attributes and the respective partial structured query language statement in response to the

request, [Sadiq, col. 6, lines 31-35] wherein the partial structured query language statement comprises an action that may effect the type of the item" [].

Claim 15 can be mapped to Sadiq as follows: "The system of claim 11, wherein the set of program code comprises a set of embedded structured query language statements for preparing the structured query language statement for the item" [Sadiq, col. 6, lines 31-45].

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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14. Claims 4 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,032,153 (Sadiq et al.) in view of U.S. Patent Application Publication No. 2003/0093433 (Seaman et al.).

For **Claim 4**, Sadiq teaches: "The method of claim 1, wherein retrieving the set of attributes and the respective partial structured query language statement comprises."

Sadiq discloses the above limitation but does not expressly teach: "retrieving at least a portion of an insert statement."

With respect to Claim 4, an analogous art, Seaman, teaches: "retrieving at least a portion of an insert statement" [Seaman, paragraph [0144]].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Seaman and Sadiq before him/her to combine Seaman with Sadiq because both inventions are directed towards dynamically generating queries/SQL.

Seaman's invention would have been expected to successfully work well with Sadiq's invention because both inventions use databases to query. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising dynamically generating update queries. However, Sadiq does not expressly disclose dynamically generating insert queries. Seaman discloses a method and system for software application development and customizable runtime environment comprising dynamically generating insert queries.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Seaman and Sadiq before him/her to take the

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dynamic generation of insert queries from Seaman and install it into the invention of Sadiq, thereby offering the obvious advantage of being able not only to update the database (modify) but update by adding (inserting) new records offering the ability to add new records with Sadiq's invention.

For Claim 20, Sadiq teaches: "The system of claim 11, wherein the attributes stored in the second table include."

Sadiq discloses the above limitation but does not expressly teach:

- "a structured query language statement that inserts a new item into the first table."

With respect to Claim 20, an analogous art, Seaman, teaches:

- "a structured query language statement that inserts a new item into the first table" [Seaman, paragraph [0144] with Sadiq, col. 6, lines 31-45 with Sadiq, col. 4, lines 4-27].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Seaman and Sadiq before him/her to combine Seaman with Sadiq because both inventions are directed towards dynamically generating queries/SQL.

Seaman's invention would have been expected to successfully work well with Sadiq's invention because both inventions use databases to query. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising dynamically generating update queries. However, Sadiq does not expressly disclose dynamically generating insert queries. Seaman discloses a method and system for

software application development and customizable runtime environment comprising dynamically generating insert queries.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Seaman and Sadiq before him/her to take the dynamic generation of insert queries from Seaman and install it into the invention of Sadiq, thereby offering the obvious advantage of being able not only to update the database (modify) but update by adding (inserting) new records offering the ability to add new records with Sadiq's invention.

15. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,032,153 (Sadiq et al.) in view of U.S. Patent No. 5,950,188 (Wildermuth).

For **Claim 5**, Sadiq teaches: "The method of claim 1, wherein retrieving the set of attributes and the respective partial structured query language statement comprises."

Sadiq discloses the above limitation but does not expressly teach: "retrieving information that indicates access rights for the structured query language statement."

With respect to Claim 5, an analogous art, Wildermuth, teaches: "retrieving information that indicates access rights for the structured query language statement" [Wildermuth, col. 7, lines 1-21 with Wildermuth, cols. 7-8, lines 61-3].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Wildermuth and Sadiq before him/her to combine

Wildermuth with Sadiq because both inventions are directed towards issuing commands/queries to databases.

Wildermuth's invention would have been expected to successfully work well with Sadiq's invention because both inventions use databases using SQL. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising SQL. However, Sadiq does not expressly disclose retrieving information that indicates access rights for the SQL statement. Wildermuth discloses a database system with methods for executing system-created internal sql command statements comprising a security flag indicative of access rights for the structured query language statements.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Wildermuth and Sadiq before him/her to take the security feature from Wildermuth and install it into the invention of Sadiq, thereby offering the obvious advantage of having a more secure system where "dangerous" system functions are not exposed to inappropriate users of the system.

For **Claim 19**, Sadiq teaches: "The system of claim 11, wherein the attributes stored in the second table includes."

Sadiq discloses the above limitation but does not expressly teach: "information indicating access rights for each type of item."

With respect to Claim 19, an analogous art, Wildermuth, teaches: "information indicating access rights for each type of item" [Wildermuth, col. 7, lines 1-21 with Wildermuth, cols. 7-8, lines 61-3].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Wildermuth and Sadiq before him/her to combine Wildermuth with Sadiq because both inventions are directed towards issuing commands/queries to databases.

Wildermuth's invention would have been expected to successfully work well with Sadiq's invention because both inventions use databases using SQL. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising SQL. However, Sadiq does not expressly disclose retrieving information that indicates access rights for the SQL statement. Wildermuth discloses a database system with methods for executing system-created internal sql command statements comprising a security flag indicative of access rights for the structured query language statements.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Wildermuth and Sadiq before him/her to take the security feature from Wildermuth and install it into the invention of Sadiq, thereby offering the obvious advantage of having a more secure system where "dangerous" system functions are not exposed to inappropriate users of the system.

16. Claim 6 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,032,153 (Sadiq et al.) in view of U.S. Patent No. 6,219,676 (Reiner).

For Claim 6, Sadiq teaches: "The method of claim 1, wherein retrieving the set of attributes and the respective partial structured query language statement comprises."

Sadiq discloses the above limitation but does not expressly teach:

- "...determining a timestamp for the set of attributes and the respective partial structured query language statement; and
- selectively retrieving the set of attributes and the respective partial structured query language statement from a cache based on the timestamp."

With respect to Claim 6, an analogous art, Reiner, teaches:

- "...determining a timestamp for the set of attributes and the respective partial structured query language statement; [Reiner, col. 7, lines 43-64 with Reiner, col. 9, lines 27-45] and
- selectively retrieving the set of attributes and the respective partial structured query language statement from a cache based on the timestamp" [Reiner, col. 7, lines 43-64 with Reiner, col. 9, lines 27-45].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to combine Reiner with Sadiq because both inventions are directed towards accessing data.

Reiner's invention would have been expected to successfully work well with Sadiq's invention because both inventions use data structures to access data. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising SQL. However, Sadiq does not expressly disclose the cache data structure or timestamps being used to access data. Reiner discloses a methodology for cache coherency of web server data comprising a cache with timestamps for accessing data.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to take the cache data structure from Reiner and install it into the invention of Sadiq, thereby offering the obvious advantage of achieving the fast lookup times (thereby fast data retrieval) gained by using a cache data structure.

For Claim 12, Sadiq teaches: "The system of claim 11, further comprising."

Sadiq discloses the above limitation but does not expressly teach: "a cache that stores a copy of at least a portion of the second table."

With respect to Claim 12, an analogous art, Reiner, teaches:

- "a cache that stores a copy of at least a portion of the second table" [Reiner, col. 7, lines 43-64 with Reiner, col. 9, lines 27-45].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to combine Reiner with Sadiq because both inventions are directed towards accessing data.

Reiner's invention would have been expected to successfully work well with Sadiq's invention because both inventions use data structures to access data. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising SQL. However, Sadiq does not expressly disclose the cache data structure or timestamps being used to access data. Reiner discloses a methodology for cache coherency of web server data comprising a cache with timestamps for accessing data.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to take the cache

data structure from Reiner and install it into the invention of Sadiq, thereby offering the obvious advantage of achieving the fast lookup times (thereby fast data retrieval) gained by using a cache data structure.

Claim 13 can be mapped to Sadiq (as modified by Reiner) as follows: "The system of claim 12, wherein the second table includes a timestamp for each row in the second table" [Reiner, col. 7, lines 43-64 with Reiner, col. 9, lines 27-45].

Claim 14 can be mapped to Sadiq (as modified by Reiner) as follows: "The system of claim 13, wherein the processor is configured to selectively retrieve information from the cache or the second table based on the timestamp" [Reiner, col. 7, lines 43-64 with Reiner, col. 9, lines 27-45].

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,032,153 (Sadiq et al.) in view of U.S. Patent No. 5,742,806 (Reiner et al.).

For **Claim 7**, Sadiq teaches: "The method of claim 1, wherein preparing the structured query language statement comprises."

Sadiq discloses the above limitation but does not expressly teach: "opening a first set of cursors for the structured query language statement."

With respect to Claim 7, an analogous art, Reiner, teaches: "opening a first set of cursors for the structured query language statement" [Reiner, cols. 89-90, lines 65-5].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to combine Reiner

with Sadiq because both inventions are directed towards accessing data in databases using queries.

Reiner's invention would have been expected to successfully work well with Sadiq's invention because both inventions use databases and queries. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising SQL. However, Sadiq does not expressly disclose cursors. Reiner discloses an apparatus and method for decomposing database queries for database management system including multiprocessor digital data processing system comprising cursors with queries.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to take the cursors from Reiner and install it into the invention of Sadiq, thereby offering the obvious advantage of doing parallel operations to speed up the system of Sadiq.

Claim 8 can be mapped to Sadiq (as modified by Reiner) as follows: "The method of claim 7, further comprising opening a second set of cursors when all of the cursors in the first set have been opened" [Reiner, cols. 89-90, lines 65-5].

For **Claim 16**, Sadiq teaches: "The system of claim 15, further comprising a set of files that include."

Sadiq discloses the above limitations but does not expressly teach: "a plurality of cursors for the embedded structured query language statements."

With respect to Claim 16, an analogous art, Reiner, teaches: "a plurality of cursors for the embedded structured query language statements" [Reiner, cols. 89-90, lines 65-5].

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to combine Reiner with Sadiq because both inventions are directed towards accessing data in databases using queries.

Reiner's invention would have been expected to successfully work well with Sadiq's invention because both inventions use databases and queries. Sadiq discloses a method and system for maintaining persistence in a shared object system comprising SQL. However, Sadiq does not expressly disclose cursors. Reiner discloses an apparatus and method for decomposing database queries for database management system including multiprocessor digital data processing system comprising cursors with queries.

It would have been obvious to one of ordinary skill in the art at the time of invention having the teachings of Reiner and Sadiq before him/her to take the cursors from Reiner and install it into the invention of Sadiq, thereby offering the obvious advantage of doing parallel operations to speed up the system of Sadiq.

Claim 17 can be mapped to Sadiq (as modified by Reiner) as follows: "The system of claim 16, wherein the set of files comprise a first package of cursors that are opened by the embedded structured query language statements" [Reiner, cols. 89-90, lines 65-5].

Claim 18 can be mapped to Sadiq (as modified by Reiner) as follows: "The system of claim 17, wherein the set of files further comprises a second package of cursors that are opened by the embedded structured query language statements when all of the cursors in the first package have been opened" [Reiner, cols. 89-90, lines 65-5].

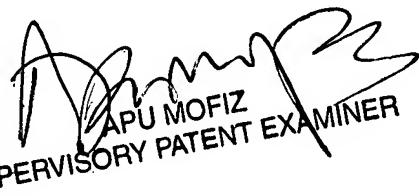
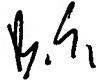
Conclusion

17. Any prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is advised that, although not used in the rejections above, prior art cited on any PTO-892 form and not relied upon is considered materially relevant to the applicant's claimed invention and/or portions of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent S. Stace whose telephone number is 571-272-8372 and fax number is 571-273-8372. The examiner can normally be reached on M-F 9am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brent Stace



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SUPERVISORY PATENT EXAMINER